



FIG. 1 PRIORART

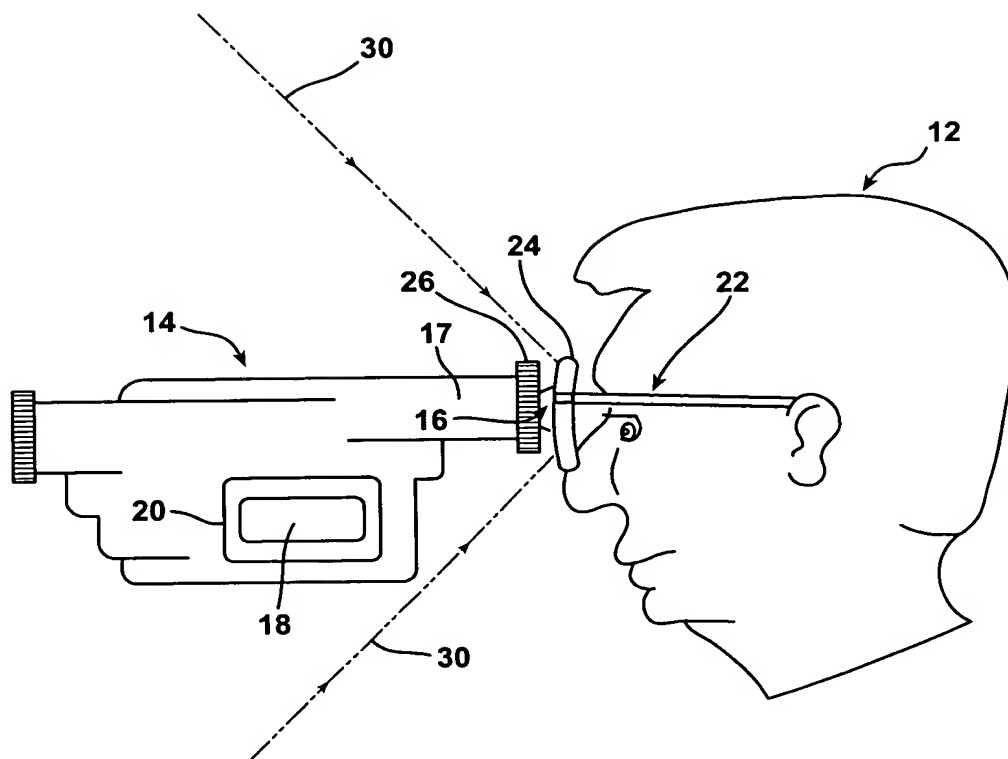


FIG.2

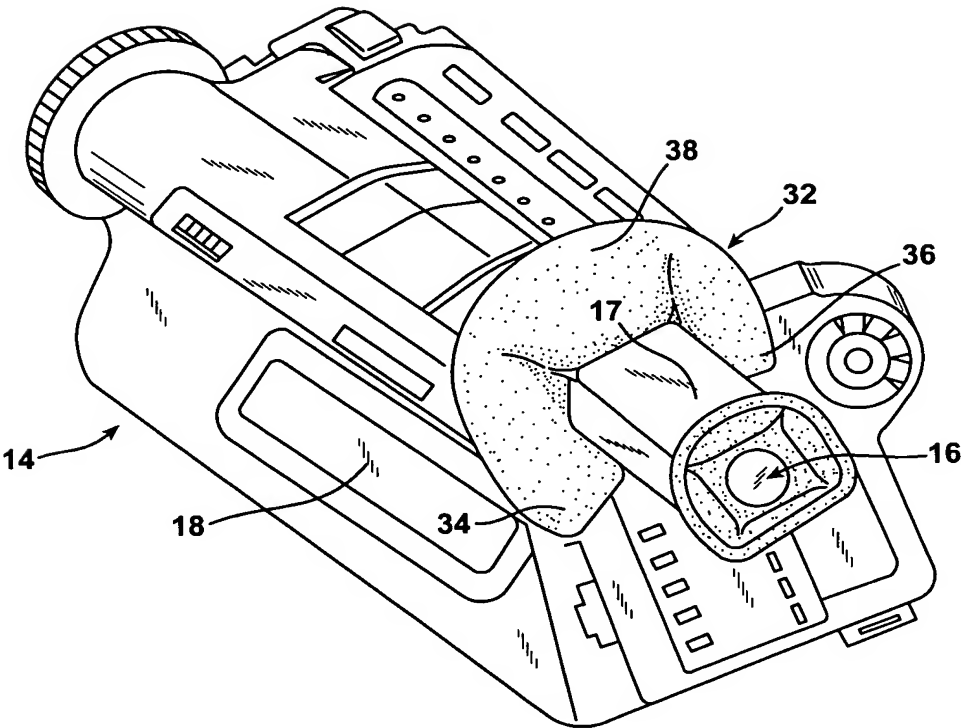
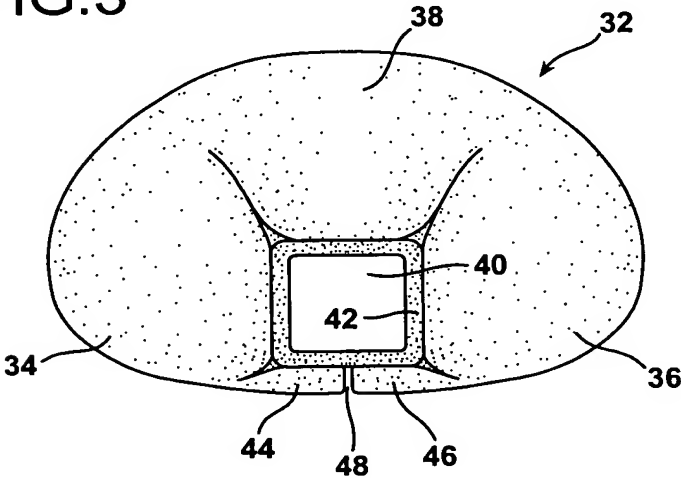


FIG.3



3/22

FIG.3A

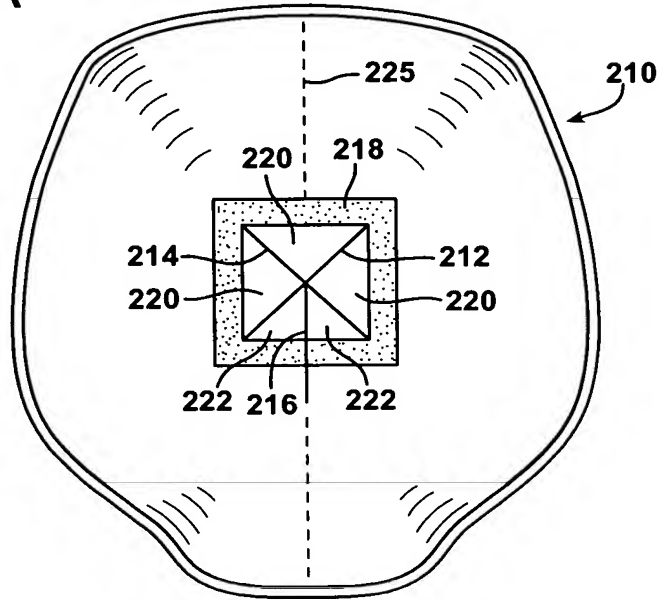
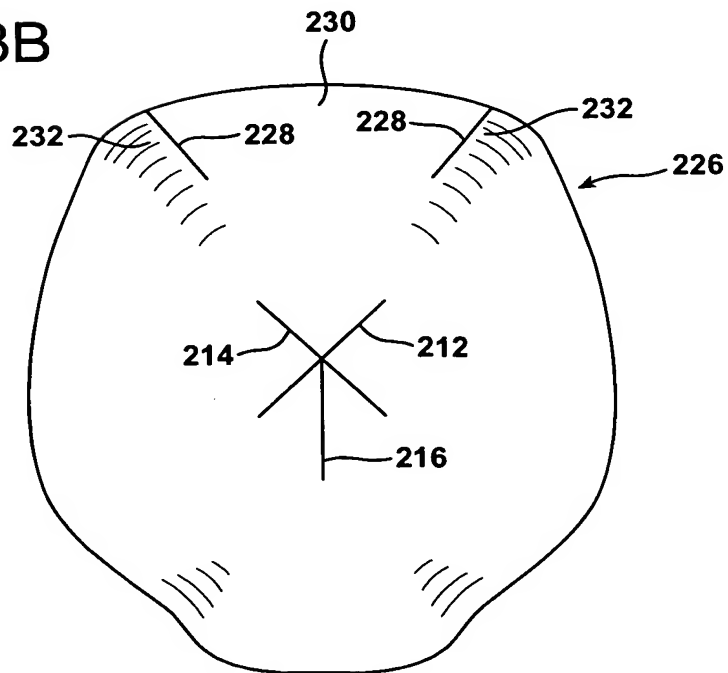


FIG.3B



4/22

FIG.3C

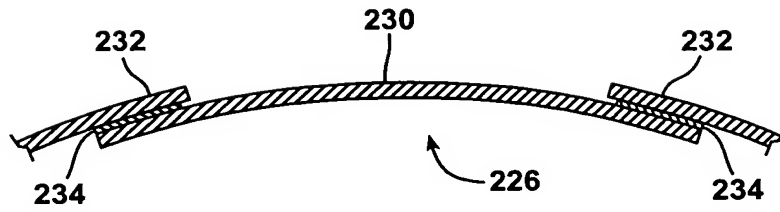
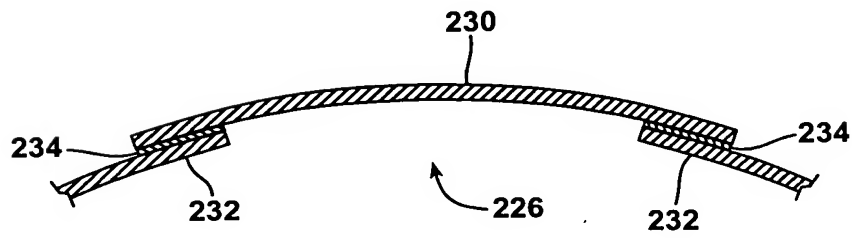


FIG.3D



5/22

FIG.4

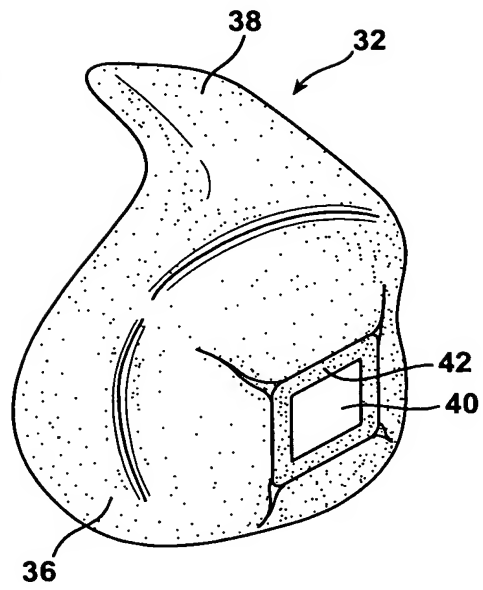


FIG.5

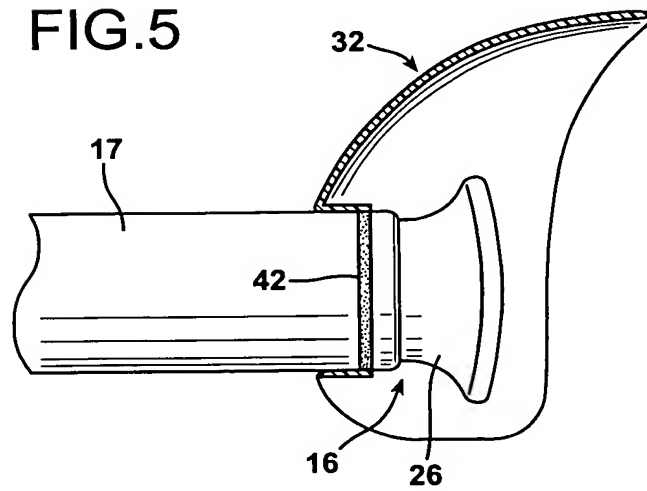


FIG. 5A

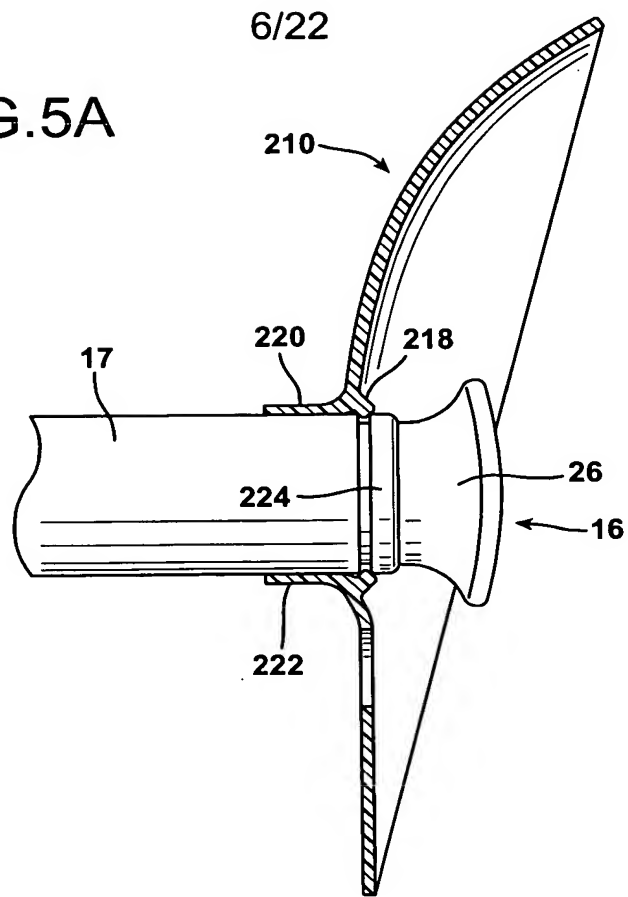
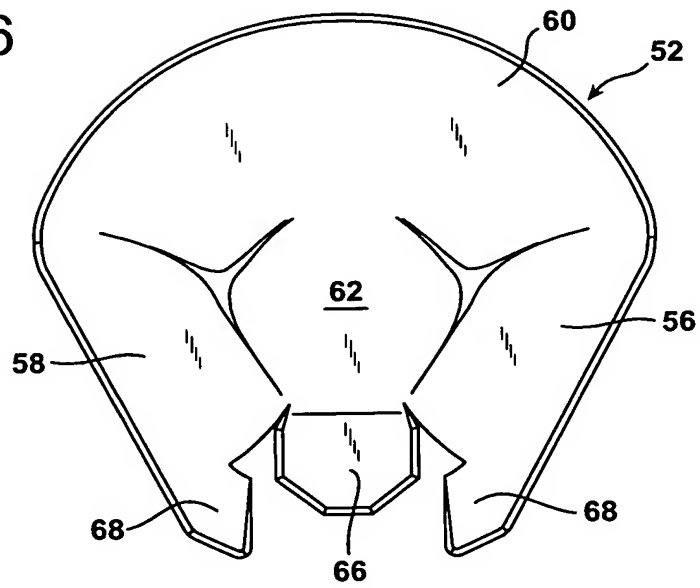


FIG. 6



7/22

FIG. 6A

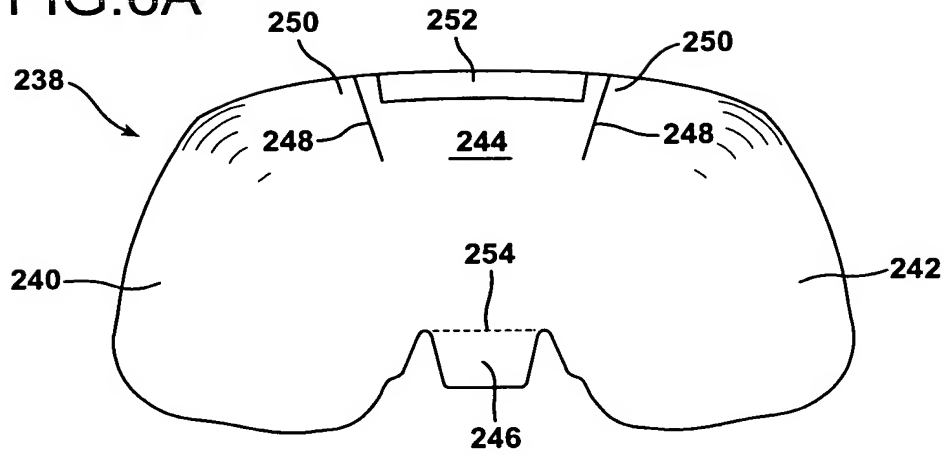


FIG. 6B

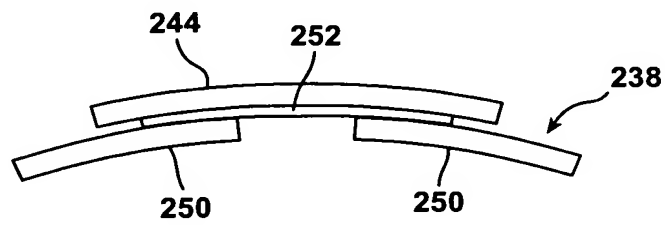
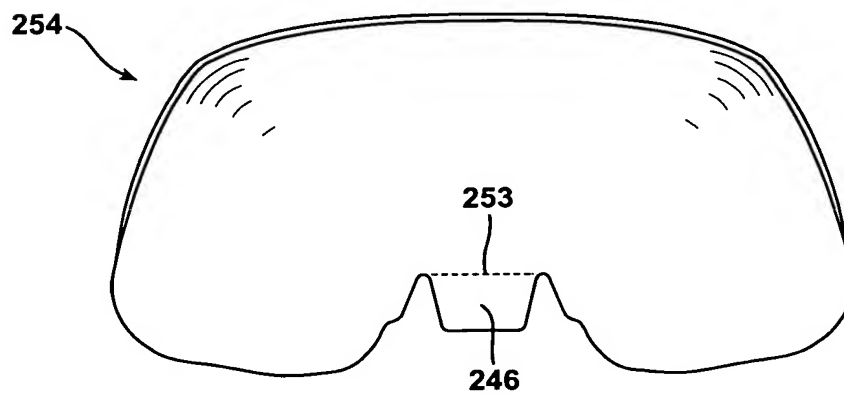


FIG. 6C



8/22

FIG.7

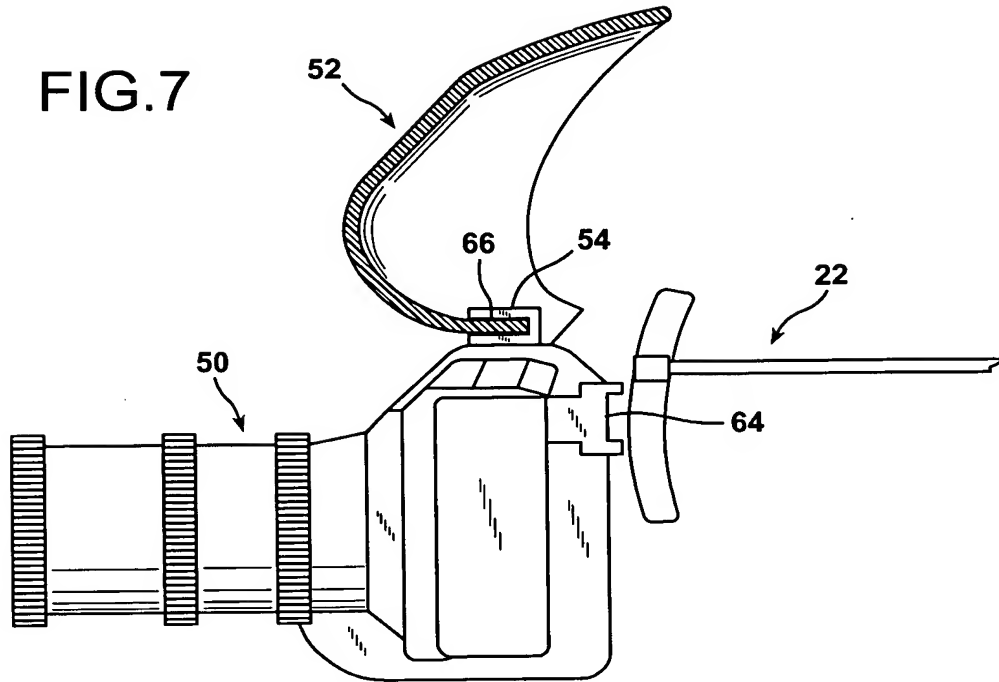
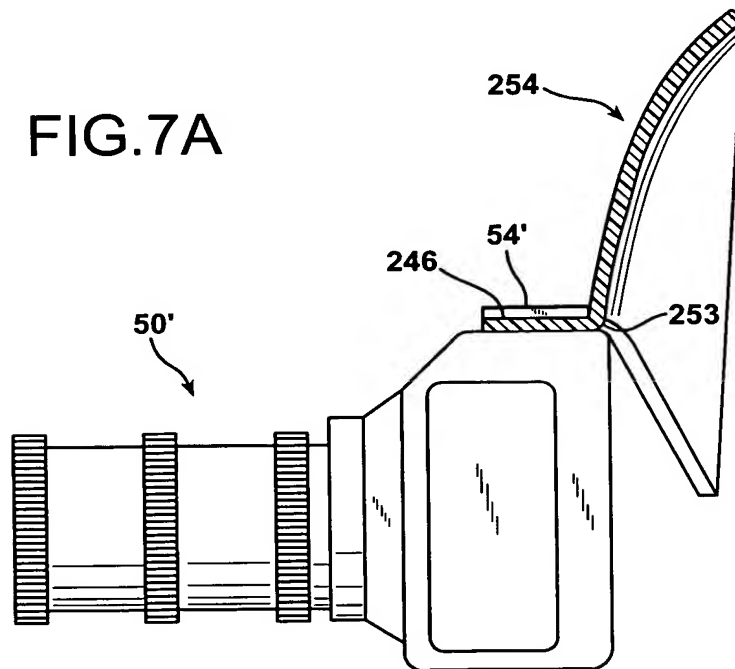


FIG.7A





9/22

FIG.8

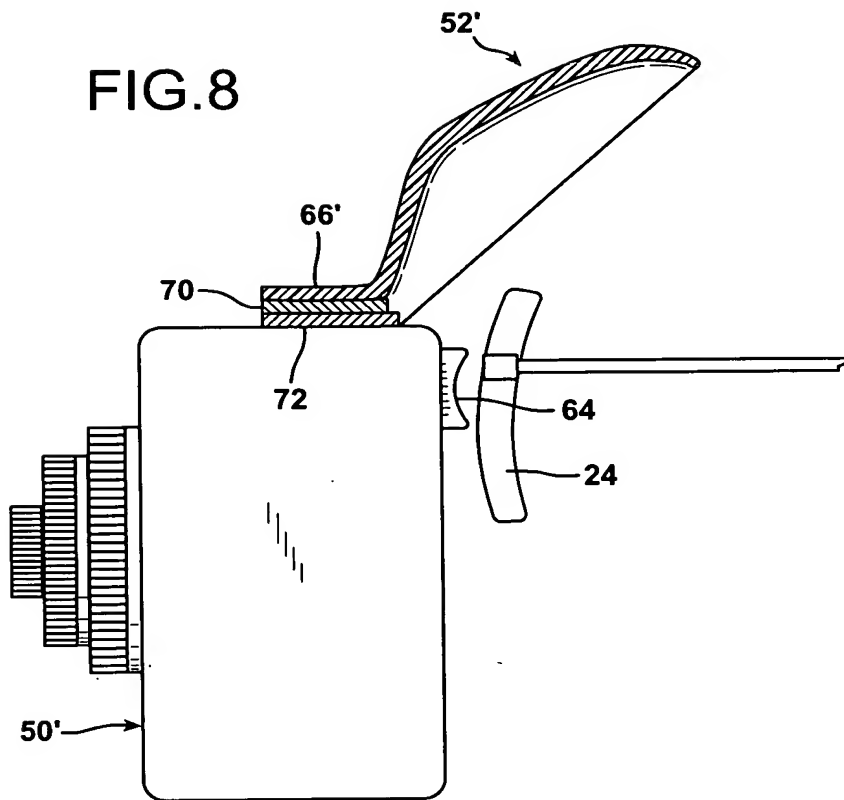
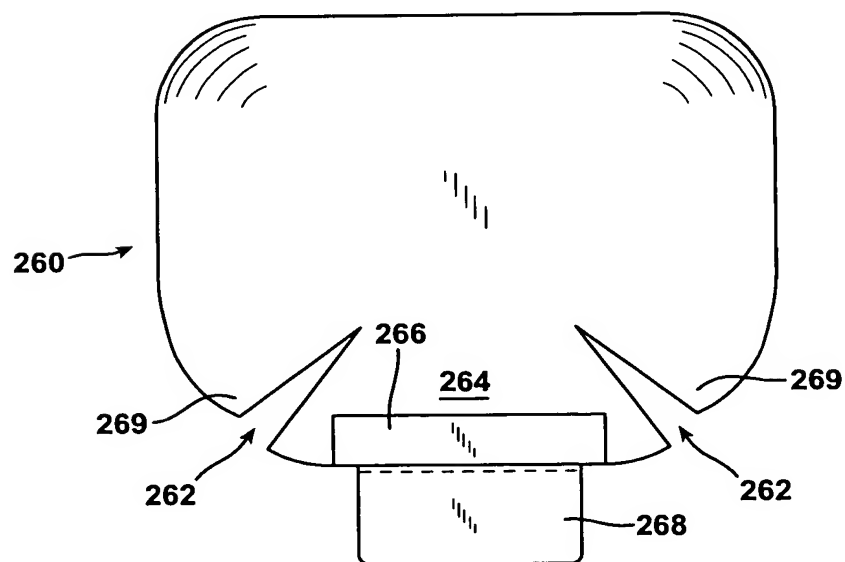


FIG.8A



10/22

FIG.8B

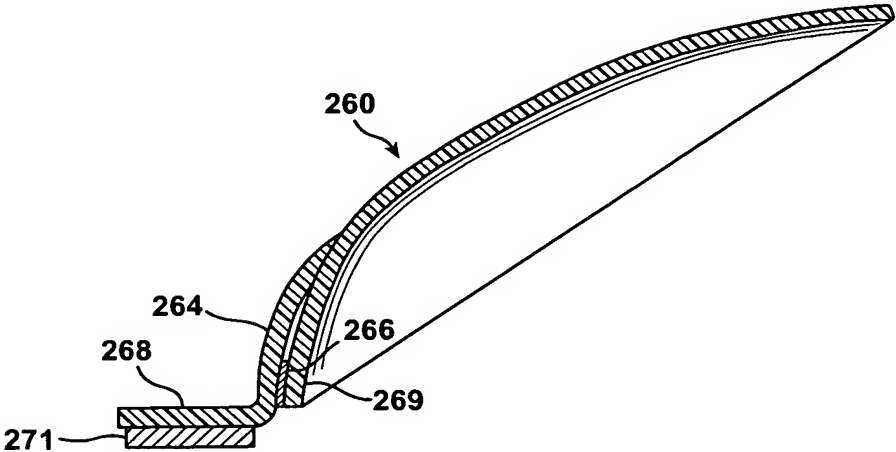
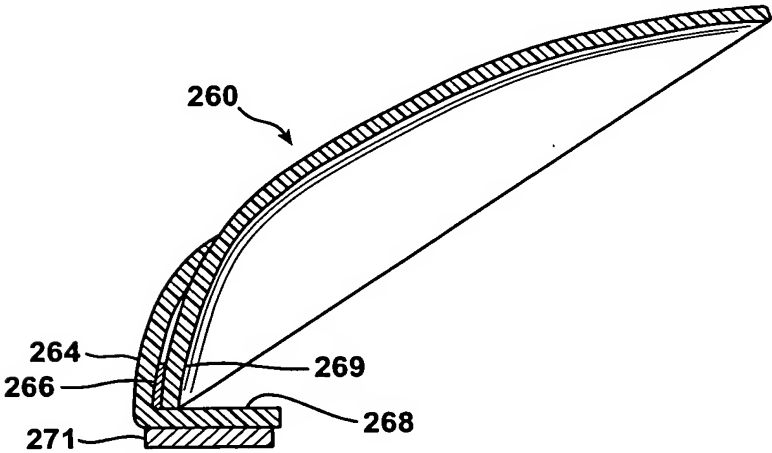
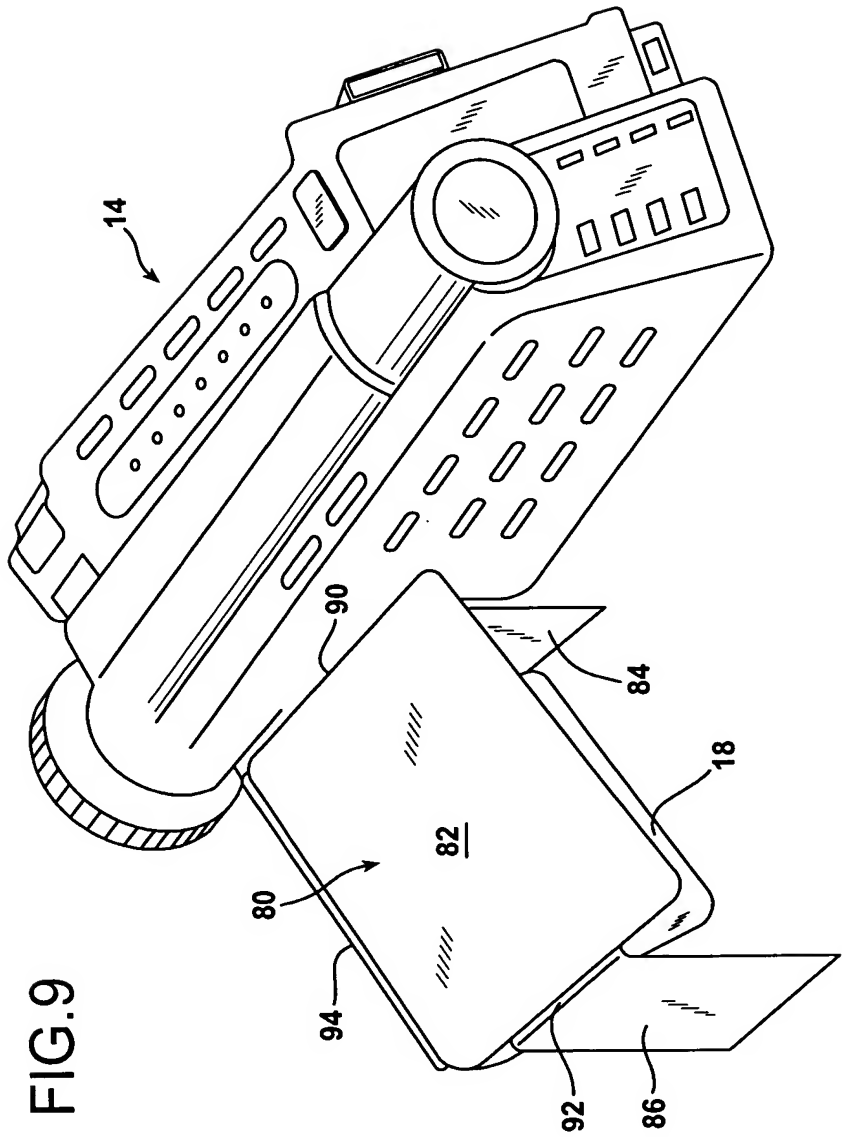


FIG.8C



11/22



12/22

FIG.10

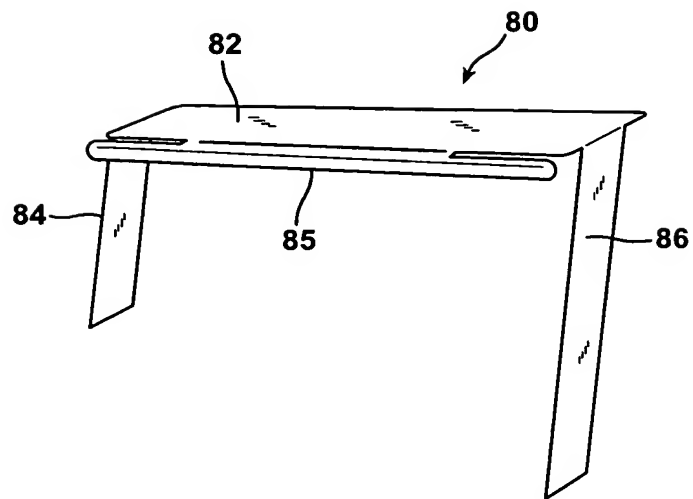
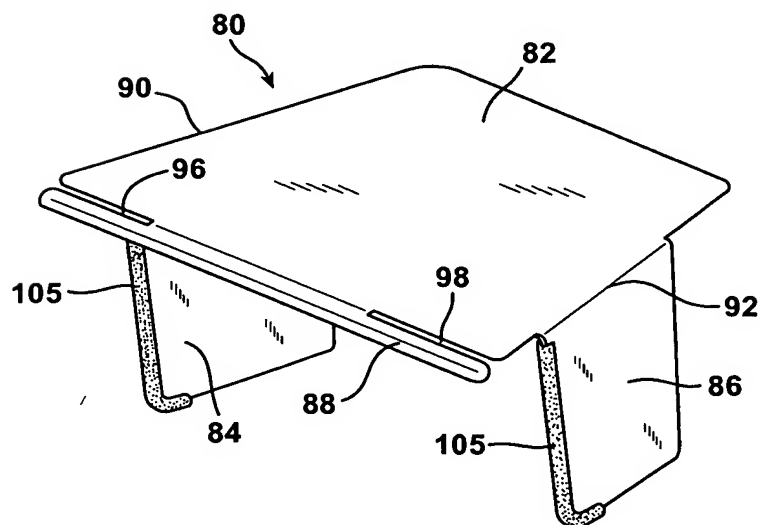
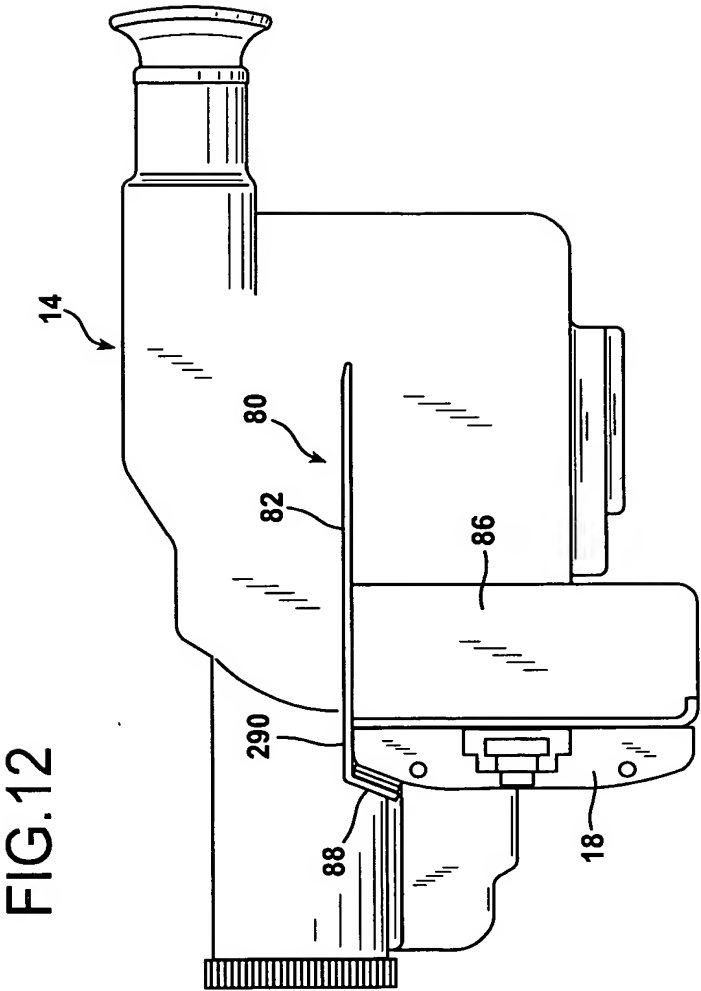


FIG.11





14/22

FIG.12A

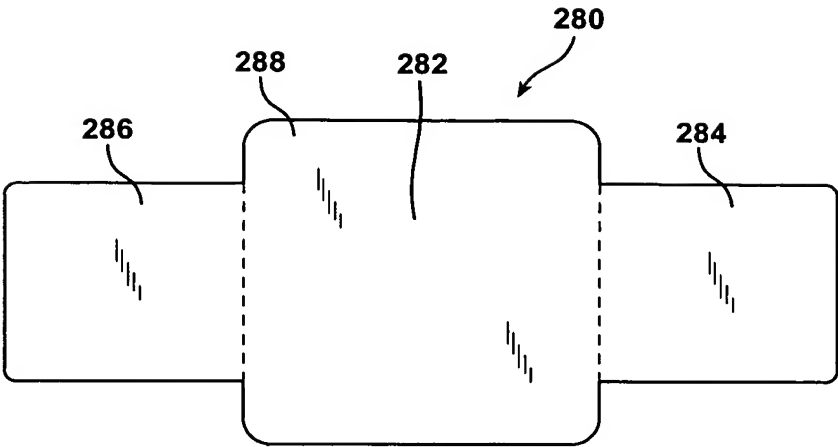
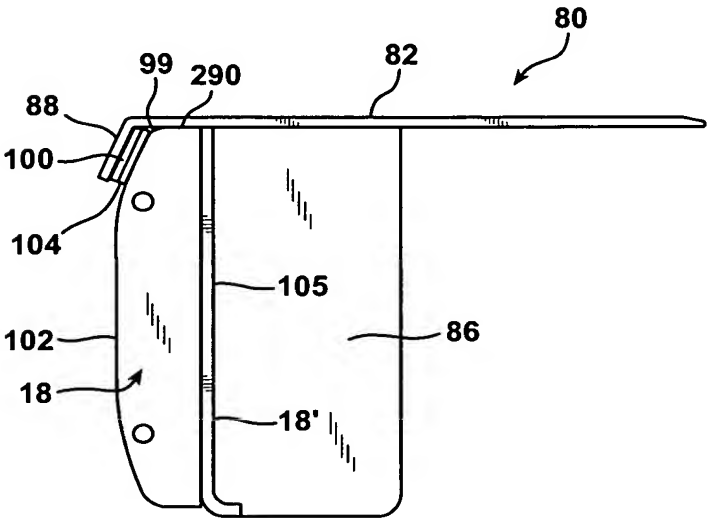


FIG.13



15/22

FIG.13A

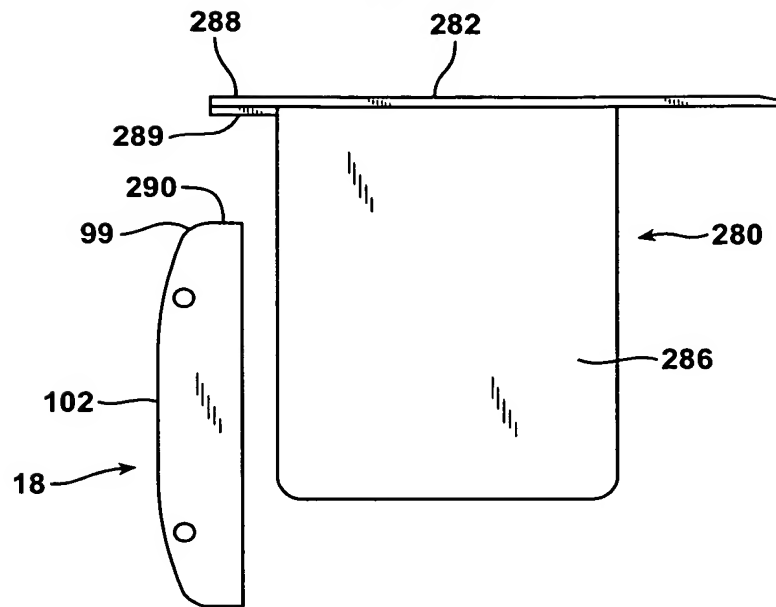
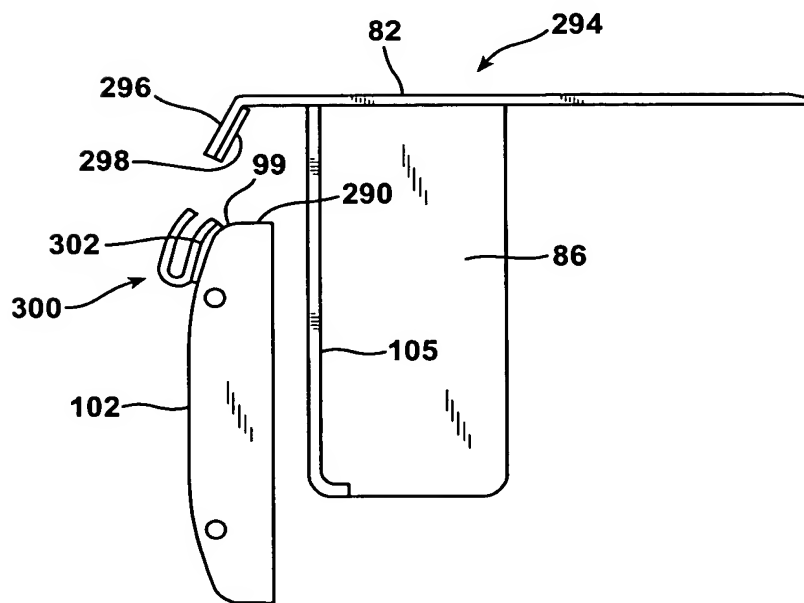


FIG.13B



16/22

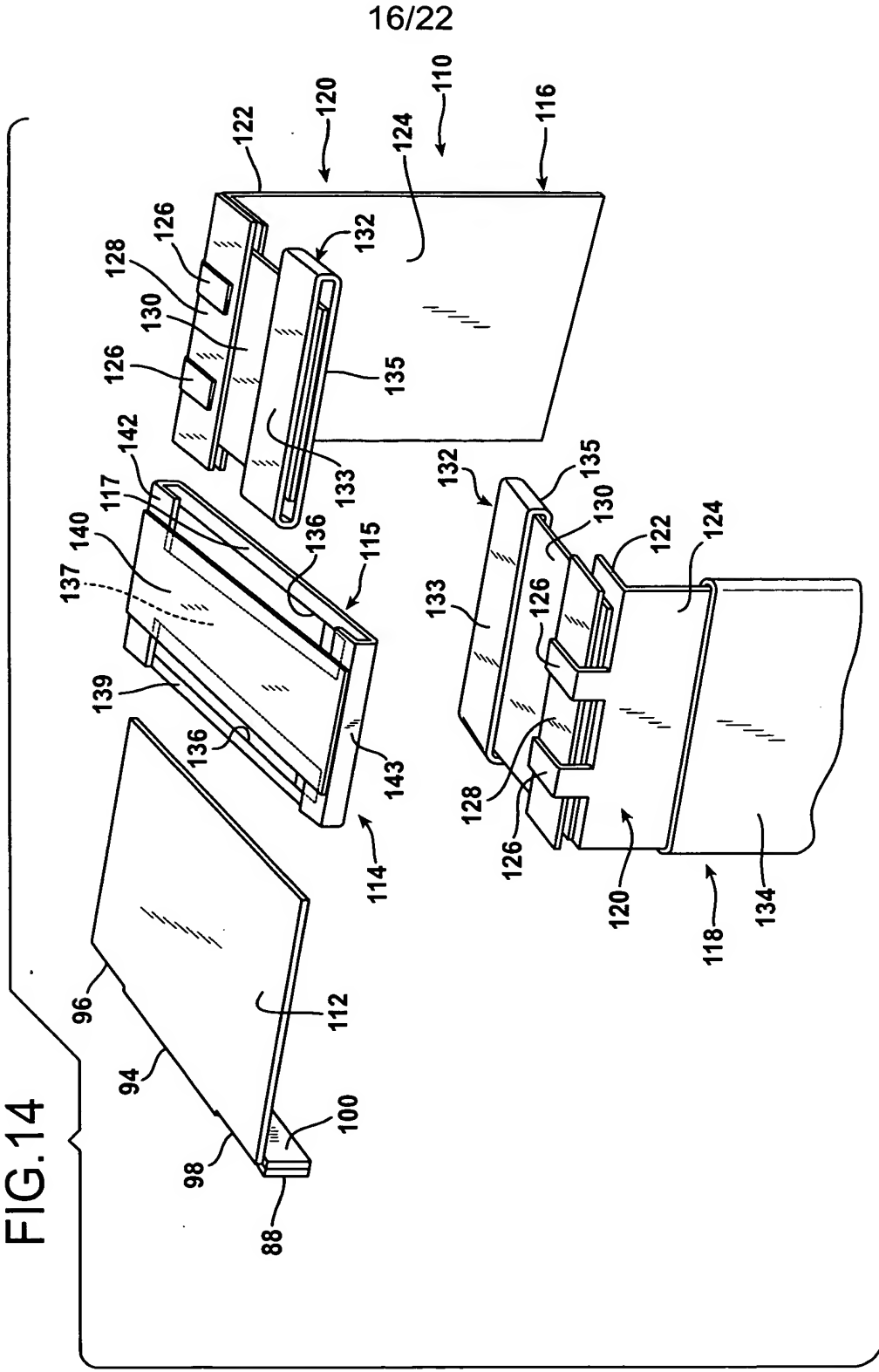
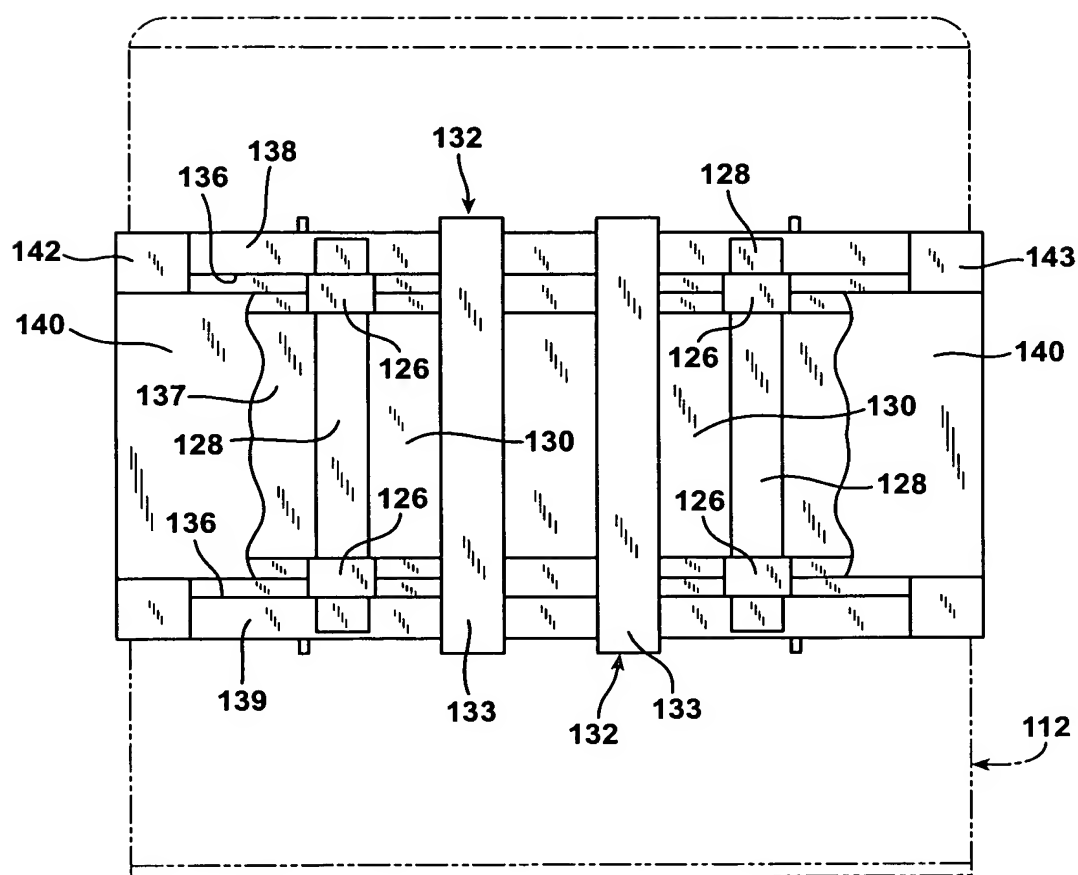




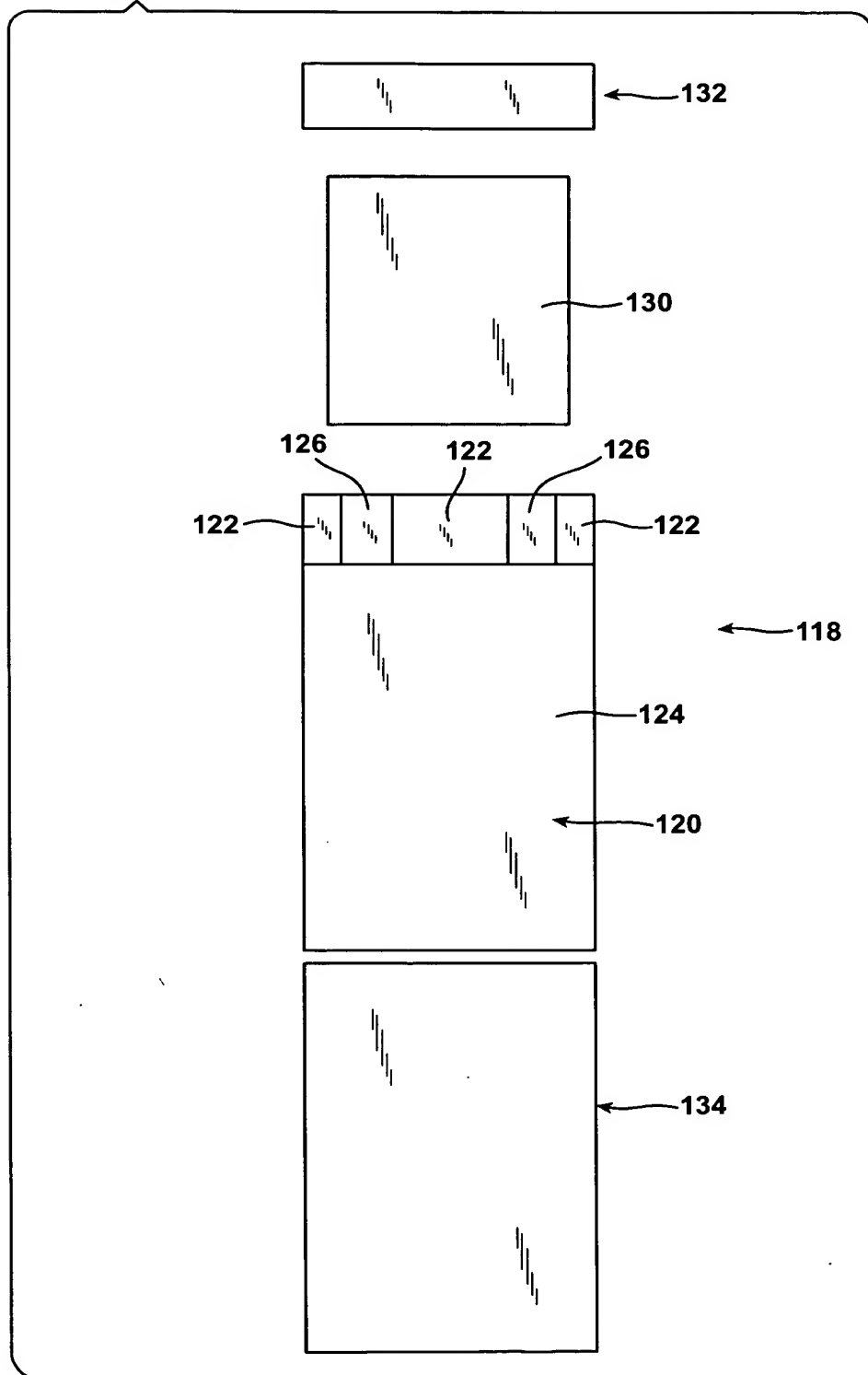
FIG. 1 is a cross-sectional view of a multi-layered structure 100. The structure includes a top layer 88, a middle section 130, and a bottom layer 112. The middle section 130 contains two vertical columns 120 and 124, each with a central core 128. The columns are separated by a central region 136. The structure is bounded by side walls 96 and 98. Arrows 18 indicate a direction of flow or force. Other labels include 132, 134, 135, 137, 138, 139, 142, and 143.

FIG. 16



19/22

FIG. 17



20/22

FIG.18

